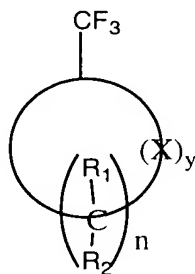


CLAIMS

1. A process for forming a 1,1-difluorovinyl cycloaliphatic compound which comprises: effecting dehydrofluorination of a trifluoromethyl cycloaliphatic compound where the trifluoromethyl group is pendent to the cycloaliphatic compound by reacting said trifluoromethyl cycloaliphatic compound with a sterically hindered base of the formula M^+NRR^- where M is sodium or potassium and bonded to the nitrogen atom of an alkyl amine where the R groups are alkyl or cycloaliphatic having secondary or tertiary carbon atoms.

2. The process of Claim 1 wherein the trifluoromethylcycloaliphatic compound is represented by the structure:



wherein R_1 and R_2 are H, C_{1-20} alkyl, C_{1-10} alkoxy, and C_{1-10} carboalkoxy, C_{1-10} alkyl ether, C_{2-10} alkenyl aryl, alkyl substituted aryl, cycloaliphatic and fused polycyclic derivatives thereof; n is an integer of at least 2; X is $CH=CH$, O, NR_3 where R_3 is C_{1-6} alkyl, C_{1-3} alkoxy, C_{1-3} carboalkoxy, or S; and, y is 0 or 1,

3. The process of Claim 2 wherein n is 4-10.

4. The process of Claim 3 wherein the sterically hindered super base is formed by the *in situ* reaction of a lithium dialkylamide of a secondary or tertiary alkyl or cycloalkyl amine and sodium or potassium alkoxide.

5. The process of Claim 4 wherein the lithium dialkylamide is selected from the group consisting of lithium diisopropylamide, lithium dicyclohexylamide, lithium diisobutylamide, lithium 2,2-6,6- tetramethylpiperidide, lithium piperidide, lithium-N-methyl-N-*t*-butyl)amide, and lithium di-*t*-butyl amide.

6. The process of Claim 5 wherein the sodium or potassium alkoxide is selected from the group consisting of sodium methoxide, potassium methoxide, sodium ethoxide, potassium ethoxide, sodium propoxide, potassium propoxide, potassium butoxide, and sodium butoxide, and potassium-t-butoxide.

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7. The process of Claim 6 wherein the sterically hindered super base is formed by the reaction of from 1 to 5 moles of sodium or potassium alkoxide per mole of lithium dialkylamide.

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8. The process of Claim 7 wherein the trifluoromethyl cycloaliphatic compound is selected from the group consisting of trifluoromethylcyclohexane, trifluoromethylcyclopentane, 1-trifluoromethyl-dihydronaphthalene, 4(4'-propylcyclohexyl)-1-trifluoromethylcyclohexane; 4-carboethoxy-1-trifluoromethylcyclohexane; 1-carboalkoxy-4 trifluoromethylcyclohexane; 3,3'-dimethyldioxane-1-trifluoromethylcyclohexane; 1-trifluoromethyl-dihydroanthracene and cycloaliphatic ring compounds bearing a CF₃ group of ring size C₄-C₁₀.

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9. The process of Claim 8 wherein from 1 to 5 moles sterically hindered super base are added per mole of trifluoromethyl cycloaliphatic compound.

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10. The process of Claim 9 wherein y is 0 and n is 5-8.

11. The process of Claim 10 wherein the alkoxide forming the super base is potassium-t-butoxide.

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12. The process of Claim 11 wherein R₁ and R₂ are H and n is 5.

13. The process of Claim 7 wherein x is NR₃ and y is 1.

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14. The process of Claim 13 wherein R₃ is H, C₁₋₃ alkyl, C₁₋₃ alkoxy or C₁₋₃ carboalkoxy.

15. The process of Claim 7 wherein X is O and y is 1.

16. The process of Claim 15 wherein R_1 and R_2 are H.

17. The process of Claim 9 wherein the trifluoromethyl cycloaliphatic compound is 4(4'-propylcyclohexyl)-1-trifluoromethylcyclohexane.

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